

SEQUENCE LISTING

<110> FUSO PHARMACEUTICAL INDUSTRIES, LTD.

<120> Novel Collectin

<130> 99P147W0

<150> JP 10-237611

<151> 1998-08-24

<160> 29

<210> 1

<211> 2024

<212> DNA

<213> Homo Sapiens

<220>

<221> CDS

<222> (670).. (1695)

<400> 1

gtcacgaatc tgcagcaaga taccagcgtg ctccagggca atctgcagaa ccaaattgat	60
tctcataatg tggatcat gaacctcaac aacctgaacc tgaccaggt gcagcagagg	120
aacctcatca cgaatctgca gcggtctgtg gatgacacaa gccaggctat ccagcgaatc	180
aagaacgact ttcaaaaatct gcagcagggt ttcttcaag ccaagaagga cacggattgg	240
ctgaaggaga aagtgcagag ctgtcagacg ctggctgcc acaactctgc gttggccaaa	300
gccacaacg acaccttgga ggatatgaac agccagctca actcattcac aggtcagatg	360

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gagaacatca ccactatctc tcaagccaac gagcagaacc tgaaagacct gcaggactta 420
 cacaagaatg cagagaatag aacagccatc aagitcaacc aactggagga acgcttccag 480
 ctctttigaga cggatatigt gaacatcatt agcaatatca gttacacagc ccaccacctg 540
 cggacgctga ccagcaatct aatgaagtc aggaccactt gcacagatac ccttaccaaa 600
 cacacagaatg atctgacctc ctggaataat accctggcca acatccgttt ggattctgtt 660
 tctctcagg atg caa caa gat ttg atg agg tcg agg tta gac act gaa gla 711

Met Gln Gln Asp Leu Met Arg Ser Arg Leu Asp Thr Glu Val

1

5

10

gcc aac tta tca gig att atg gaa gaa atg aag cta gla gac tcc aag 759

Ala Asn Leu Ser Val Ile Met Glu Glu Met Lys Leu Val Asp Ser Lys

15

20

25

30

cat ggt cag ctc atc aag aat ttt aca ata cta caa ggt cca ccg ggc 807

His Gly Gln Leu Ile Lys Asn Phe Thr Ile Leu Gln Gly Pro Pro Gly

35

40

45

ccc agg ggt cca aga ggt gac aga gga tcc cag gga ccc cct ggc cca 855

Pro Arg Gly Pro Arg Gly Asp Arg Gly Ser Gln Gly Pro Pro Gly Pro

50

55

60

act ggc aac aag gga cag aaa gga gag aag ggg gag cct gga cca cct 903

Thr Gly Asn Lys Gly Gln Lys Gly Glu Lys Gly Glu Pro Gly Pro Pro

65

70

75

ggc cct gcg ggt gag aga ggc cca att gga cca gct ggt ccc ccc gga 951

Gly Pro Ala Gly Glu Arg Gly Pro Ile Gly Pro Ala Gly Pro Pro Gly

80

85

90

gag cgt ggc ggc aaa gga tct aaa ggc tcc cag ggc ccc aaa ggc tcc 999

Glu Arg Gly Gly Lys Gly Ser Lys Gly Ser Gln Gly Pro Lys Gly Ser

95

100

105

110

cgt ggt tcc cct ggg aag ccc ggc cct cag ggc ccc agt ggg gac cca 1047

Arg Gly Ser Pro Gly Lys Pro Gly Pro Gln Gly Pro Ser Gly Asp Pro

115

120

125

ggc ccc ccg ggc cca cca ggc aaa gag gga ctc ccc ggc cct cag ggc 1095
 Gly Pro Pro Gly Pro Pro Gly Lys Glu Gly Leu Pro Gly Pro Gln Gly
 130 135 140
 cct cct ggc ttc cag gga ctt cag ggc acc gtt ggg gag cct ggg gtg 1143
 Pro Pro Gly Phe Gln Gly Leu Gln Gly Thr Val Gly Glu Pro Gly Val
 145 150 155
 cct gga cct cgg gga ctg cca ggc ttg cct ggg gta cca ggc atg cca 1191
 Pro Gly Pro Arg Gly Leu Pro Gly Leu Pro Gly Val Pro Gly Met Pro
 160 165 170
 ggc ccc aag ggc ccc ccc ggc cct cct ggc cca tca gga gcg gtg gtg 1239
 Gly Pro Lys Gly Pro Pro Gly Pro Pro Gly Pro Ser Gly Ala Val Val
 175 180 185 190
 ccc ctg gcc ctg cag aat gag cca acc ccg gca ccg gag gac aat ggc 1287
 Pro Leu Ala Leu Gln Asn Glu Pro Thr Pro Ala Pro Glu Asp Asn Gly
 195 200 205
 tgc ccg cct cac tgg aag aac ttc aca gac aaa tgc tac tat ttt tca 1335
 Cys Pro Pro His Trp Lys Asn Phe Thr Asp Lys Cys Tyr Tyr Phe Ser
 210 215 220
 gtt gag aaa gaa att ttt gag gat gca aag ctt ttc tgt gaa gac aag 1383
 Val Glu Lys Glu Ile Phe Glu Asp Ala Lys Leu Phe Cys Glu Asp Lys
 225 230 235
 tct tca cat ctt gtt ttc ata aac act aga gag gaa cag caa tgg ata 1431
 Ser Ser His Leu Val Phe Ile Asn Thr Arg Glu Glu Gln Gln Trp Ile
 240 245 250
 aaa aaa cag atg gta ggg aga gag agc cac tgg atc ggc ctc aca gac 1479
 Lys Lys Gln Met Val Gly Arg Glu Ser His Trp Ile Gly Leu Thr Asp
 255 260 265 270
 tca gag cgt gaa aat gaa tgg aag tgg ctg gat ggg aca tct cca gac 1527
 Ser Glu Arg Glu Asn Glu Trp Lys Trp Leu Asp Gly Thr Ser Pro Asp

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275	280	285	
tac aaa aat tgg aaa gct gga cag ccg gat aac tgg ggt cat ggc cat			1575
Tyr Lys Asn Trp Lys Ala Gly Gln Pro Asp Asn Trp Gly His Gly His			
290	295	300	
ggg cca gga gaa gac tgt gct ggg ttg att tat gct ggg cag tgg aac			1623
Gly Pro Gly Glu Asp Cys Ala Gly Leu Ile Tyr Ala Gly Gln Trp Asn			
305	310	315	
gat ttc caa tgt gaa gac gtc aat aac ttc att tgc gaa aaa gac agg			1671
Asp Phe Gln Cys Glu Asp Val Asn Asn Phe Ile Cys Glu Lys Asp Arg			
320	325	330	
gag aca gla cag tca tct gca tta taacggacag tgaatgggac acatgagcaa			1725
Glu Thr Val Leu Ser Ser Ala Leu			
335	340		
attttcagct ctcaaaggca aaggacacac ctttctaatt gcatcacctt ctcatcagat			1785
tgaaaaaaaaaaa aaagcacag aaaaccaatt actgaaaaaaaa aatgacagc tagtggtttt			1845
taccatccgt cattacccaa agacttggga actaaaaatgt tccccagggt gatatgctga			1905
ttttcatigt gcacatggac tgaatcacat agattctcct ccgtcagtaa ccgtgcgatt			1965
atacaaatta tgtcttccaa agtatggaac actccaatca gaaaaagggt atcatcccg			2024

<210> 2

<211> 547

<212> PRT

<213> Homo Sapiens

<220>

<223> Deduced Amino Acid Sequence of Novel Collectin from Nucleotide Sequence.

<400> 2

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Met Tyr Ser His Asn Val Val Ile Met Asn Leu Asn Asn Leu Asn Leu
 1 5 10 15
 Thr Gln Val Gln Gln Arg Asn Leu Ile Thr Asn Leu Gln Arg Ser Val
 20 25 30
 Asp Asp Thr Ser Gln Ala Ile Gln Arg Ile Lys Asn Asp Phe Gln Asn
 35 40 45
 Leu Gln Gln Val Phe Leu Gln Ala Lys Lys Asp Thr Asp Trp Leu Lys
 50 55 60
 Glu Lys Val Gln Ser Leu Gln Thr Leu Ala Ala Asn Asn Ser Ala Leu
 65 70 75 80
 Ala Lys Ala Asn Asn Asp Thr Leu Glu Asp Met Asn Ser Gln Leu Asn
 85 90 95
 Ser Phe Thr Gly Gln Met Glu Asn Ile Thr Thr Ile Ser Gln Ala Asn
 100 105 110
 Glu Gln Asn Leu Lys Asp Leu Gln Asp Leu His Lys Asp Ala Glu Asn
 115 120 125
 Arg Thr Ala Ile Lys Phe Asn Gln Leu Glu Glu Arg Phe Gln Leu Phe
 130 135 140
 Glu Thr Asp Ile Val Asn Ile Ile Ser Asn Ile Ser Tyr Thr Ala His
 145 150 155 160
 His Leu Arg Thr Leu Thr Ser Asn Leu Asn Glu Val Arg Thr Thr Cys
 165 170 175
 Thr Asp Thr Leu Thr Lys His Thr Asp Asp Leu Thr Ser Leu Asn Asn
 180 185 190
 Thr Leu Ala Asn Ile Arg Leu Asp Ser Val Ser Leu Arg Met Gln Gln
 195 200 205
 Asp Leu Met Arg Ser Arg Leu Asp Thr Glu Val Ala Asn Leu Ser Val
 210 215 220
 Ile Met Glu Glu Met Lys Leu Val Asp Ser Lys His Gly Gln Leu Ile

[illegible][illegible]

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Gly Arg Glu Ser His Trp Ile Gly Leu Thr Asp Ser Glu Arg Glu Asn
465 470 475 480

Glu Trp Lys Trp Leu Asp Gly Thr Ser Pro Asp Tyr Lys Asn Trp Lys
485 490 495

Ala Gly Gln Pro Asp Asn Trp Gly His Gly His Gly Pro Gly Glu Asp
500 505 510

Cys Ala Gly Leu Ile Tyr Ala Gly Gln Trp Asn Asp Phe Gln Cys Glu
515 520 525

Asp Val Asn Asn Phe Ile Cys Glu Lys Asp Arg Glu Thr Val Leu Ser
530 535 540

Ser Ala Leu
545

 $\langle 210 \rangle$ 3

$\langle 211 \rangle$ 27

<212> PRT

⟨213⟩ Artificial Sequence

 $\langle 220 \rangle$

<223> Modified Consensus Sequence of collectins Hybridizable with Novel Collectin.

<400> 3

Glu Lys Cys Val Glu Met Tyr Thr Asp Gly Lys Trp Asn Asp Arg Asn
1 5 10 15
Cys Leu Gln Ser Arg Leu Ala Ile Cys Glu Phe
20 25

$\langle 210 \rangle$ 4

8/17

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a Reverse Primer for Screening a Novel Collectin.

<400> 4

caatctgatg agaaggtgat g

21

<210> 5

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a Forward Primer for Screening a Novel Collectin.

<400> 5

acgaggggct ggatgggaca t

21

<210> 6

<211> 27

<212> PRT

<213> Artificial Sequence

<220>

<223> Consensus sequence of three collectins which were reported heretofore.

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<400> 6

Glu Asp Cys Val Leu Leu Leu Lys Asn Gly Gln Trp Asn Asp Val Pro

1

5

10

15

Cys Ser Thr Ser His Leu Ala Val Cys Glu Phe

20

25

<210> 7

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> M13 Universal Primer Sequence for Sequencing.

<400> 7

cgacgttgta aaacgacggc cagt

24

<210> 8

<211> 17

<212> DNA

<213> Artificial Sequence

<220>

<223> M13 Reverse Primer Sequence for Sequencing.

<400> 8

caggaaaca gctatgac

17

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<210> 9

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a λ gt11 Reverse Primer for Sequencing.

<400> 9

ttgacaccag accaactggg aatg

24

<210> 10

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a λ gt11 Forward Primer for Sequencing.

<400> 10

ggtagcgacg actcctggag cccg

24

<210> 11

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a Primer for Screening a Novel Collectin.

11/17

<400> 11

cgtgaaaatg aatggaagtg g

21

<210> 12

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a Primer for Screening a Novel Collectin.

<400> 12

ttttatccat tgctgttcct c

21

<210> 13

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a Primer for Sequencing a Novel Collectin.

<400> 13

ctggcagtcc ccgaggtcca g

21

<210> 14

<211> 21

<212> DNA

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<213> Artificial Sequence

<220>

<223> Sequence of a Primer for Sequencing a Novel Collectin.

<400> 14

gctgggtcccc ccggagagcg t

21

<210> 15

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a 1RC2 Primer for Cap Site Sequencing.

<400> 15

caaggtacgc cacagcgtat g

21

<210> 16

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a Synthetic TGPI Primer for Cap Site Sequencing.

<400> 16

tcttcagttt ccctaattccc

20

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<210> 17

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a 2RC2 Primer for Cap Site Sequencing.

<400> 17

gtacgccaca gcgtatgatg c

21

<210> 18

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a Synthetic TGP2 Primer for Cap Site Sequencing.

<400> 18

catcttgac aaacttcata g

21

<210> 19

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a Primer for Screening a Novel Collectin.

<400> 19

gaagacaagt cttcaactct tg

22

<210> 20

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a Primer for Screening a Novel Collectin.

<400> 20

ctctgagctct gtgaggccga tc

22

<210> 21

<211> 111

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a Probe for Screening a Novel Collectin.

<400> 21

gaagacaagt cttcacatct tgttttcata aacactagag aggaacagca atggataaaa

60

aaacagatgg tagggagaga gagccactgg atcggcctca cagactcaga g

111

<210> 22

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a Forward Primer for Screening a Novel Collectin.

<400> 22

gtgccccctgg ccctgcagaa tg

22

<210> 23

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a Reverse Primer for Screening a Novel Collectin.

<400> 23

gcatatcacc ctggggaaca ttttag

26

<210> 24

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a Sense Primer for Screening β -Actin.

<400> 24

caagagatgg ccacggctgc t

21

<210> 25

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of an Antisense Primer for Screening β -Actin.

<400> 25

tccttctgca tcctgtcggc a

21

<210> 26

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a Sense Primer for Amplifying the Novel Collectin.

<400> 26

aaggaaaaaa gcggccgcat gcaacaagat ttgatgagg

39

<210> 27

<211> 29

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a Reverse Primer for Amplifying the Novel Collectin.

<400> 27

gctctagatt ataatgcaga tgacagtac

29

<210> 28

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a Sense Primer for Amplifying the Nockout Gene.

<400> 28

atgcaacaag atttgatgag g

21

<210> 29

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence of a Sense Primer for Amplifying the Nockout Gene.

<400> 29

cctacccggt agaattgacc

20

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